动 物 学 研 究 2001, Dec. 22 (6): 478~484 CN 5-1040/Q ISSN 0254-5853
Zoological Research

拱背果蝇属三新种记述
(双翅目: 果蝇科)

权陆军 张文霞[①]
(北京大学生命科学学院 北京 100871 quanlj@water.pku.edu.cn)

摘要: 记述了拱背果蝇属 (*Lordiphosa*) 黑色拱背果蝇种组 (*nigricolor* species-group) 3新种: 黑腿拱背果蝇 (*Lordiphosa nigrifemur* sp.nov.)、鲁甸拱背果蝇 (*Lordiphosa ludianensis* sp.nov.) 和施氏拱背果蝇 (*Lordiphosa shii* sp.nov.)。

关键词: 双翅目; 果蝇科; 拱背果蝇属; 新种
中图分类号: Q969.462.2 **文献标识码**: A **文章编号**: 0254-853(2001)06-0478-07

Basden (1961) 以 *Drosophila fenestrarum* Fallén (1823) 为模式种在果蝇属中建立了拱背果蝇亚属。Grimaldi (1990) 基于支序分类分析的结果将拱背果蝇亚属上升为属。该属划分为4个种组: *fenestrarum*, *nigricolor*, *miki* 和 *denticeps*, 原来属于该属的 *tenuicauda* 种组将移入 *Dichaetophora* 属 (Hu & Toda)。本文采用 Grimaldi 的分类系统, 所记述的3新种均属于 *nigricolor* 种组。模式标本保存于北京大学生命科学学院。

1 黑腿拱背果蝇, 新种 *Lordiphosa nigrifemur* sp.nov. (图1)

鉴别特征: 3对足腿节除末端外均为深棕色至黑色。阳基侧突 (图1: D, E) 臀侧二分叉, 背侧突长约为腹侧突长的2倍; 前侧突小; 腹缘中央可见约6个感觉毛点。阳茎 (图1: D, E) 分左右两叶, 从每叶的亚中背侧起分叉, 端部呈指状, 背侧指突稍短; 阳茎基突膜质, 与生殖板融合, 端部具许多指状突。

雌雄性头部: 复眼暗黄色, 被微毛。单眼三角区棕色。间额深棕色。眶区浅棕色。颜暗黄色, 颜脊低, 仅占颜面的1/2。口上片深棕色。颊暗棕色。后头棕色。触角梗节棕色, 具2根粗刚毛。第1鞭节浅棕色。触角芒端叉小, 背叉5, 腹叉2。下颚须细长, 深棕色, 端部具1长粗刚毛。

胸部: 背板深棕色, 沿背中鬃对称分布有4浅色细纵纹, 起始于背板前缘、分别终止于前背中鬃内侧前和后背中鬃外侧前; 肩板内侧颜色与纵纹颜色同。肩板浅棕色, 具2刚毛, 下面1根较长。正中刚毛6列。小盾片深棕色。小盾基鬃平行, 小盾端鬃交叉。

翅: 透明。翅脉浅黄色。r-m 和 dm-cu 非云状。C_1 刚毛2, 几乎等长。R_{2+3}端部微向前缘脉弯曲。R_{4+5}和 M_1 几乎平行。平衡棒乳白色。

足: 暗黄色; 基节棕色。3对足的胫节均具近端背鬃; 前足及中足的胫节具端鬃。前足第1跗节长等于其余各分跗节长之和, 中足和后足第1跗节长大于其余各分跗节长之和。

腹部: 背板深棕色。腹板浅棕色。侧膜浅色。

雄性外生殖器: 生殖背板 (图1A) 除腹侧及前缘外均被微毛, 侧面及背部约具8根刚毛, 臀腹缘约具8根刚毛。抱器 (图1: A, B) 宽, 臀缘约具12个从背到腹大小逐次减小的深棕色齿, 齿端均尖, 齿列呈臀向凸形排列; 腹端内侧具多根刚毛, 腹缘具2根刚毛。肛尾叶 (图1: A, C) 椭圆形, 被微毛, 约具12根刚毛; 腹端稍延长, 细窄, 腹缘约具5根成列的短鬃。生殖腹板 (图1: D, E) 近似倒三角形, 不具侧中刺。生殖板 (图1:

收稿日期: 2001-04-16; 修改稿收到日期: 2001-06-15
基金项目: 国家自然科学基金资助项目主任基金资助 (30050001)
①联系作者

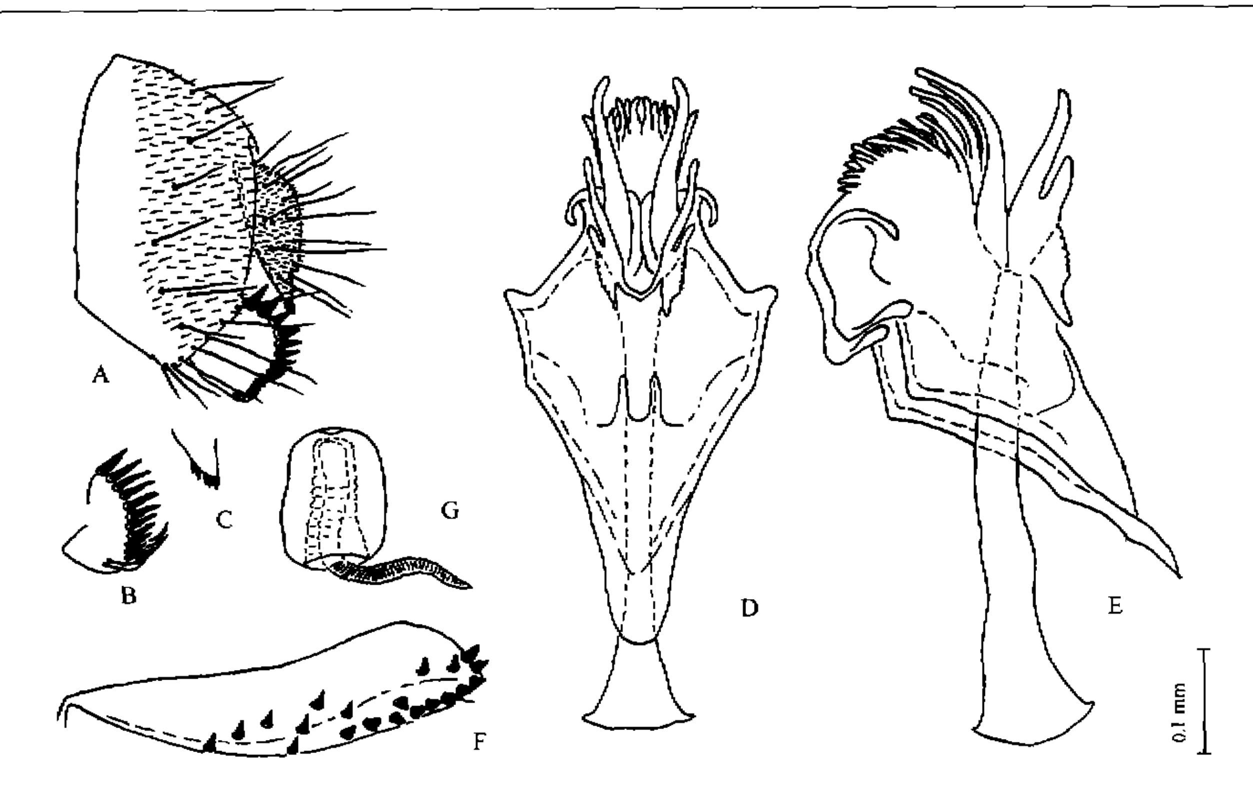


图 1　黑腿拱背果蝇，新种 *Lordiphosa nigrifemur* sp. nov.

A. 生殖背板、肛尾叶和抱器（侧面观）(epandrium, cercus and surstylus, in lateral view)；B. 抱器腹部（ventral part of surstylus)；C. 肛尾叶（cercus)；D. 阳茎、阳基内骨、生殖板、生殖腹板（腹面观）(aedeagus, apodeme, gonopod and hypandrium, in ventral view)；E. 阳茎、阳基内骨、生殖板、生殖腹板（侧面观）(aedeagus, apodeme, gonopod and hypandrium, in lateral view)；F. 产卵器（oviscapt)；G. 受精囊（spermatheca)。

D，E）融合，侧面观呈马鞍状，臀腹缘具细长突起。阳基内骨（图1：D，E）端部宽，长约为阳茎的2倍，深棕色。

雌性外生殖器：产卵器（图 1F）端部圆，缘齿约13枚，盘齿端部尖，约7枚。前腹桥窄。受精囊（图 1G）椭圆形，顶部稍凹陷；内陷达受精囊的内顶端，内陷的基1/2及管均具皱折。

测量(mm)：BL = 2.25(2.12 ~ 2.44) in ♂，2.54(2.30 ~ 2.80) in ♀；ThL = 1.00(0.92 ~ 1.08) in ♂，1.05(0.98 ~ 1.12) in ♀；WL = 2.49(2.44 ~ 2.52) in ♂，2.70(2.44 ~ 2.86) in ♀；WW = 1.10 (1.00 ~ 1.12) in ♂，1.17(1.12 ~ 1.2) in ♀。

比例：arb = 4 ~ 5/2 ~ 3；FW/HW = 0.54(0.51 ~ 0.58) in ♂，0.58(0.53 ~ 0.69) in ♀；ch/o = 0.37 (0.33 ~ 0.40) in ♂，0.33(0.27 ~ 0.39) in ♀；prorb = 0.45(0.36 ~ 0.6)；rcorb = 0.21(0.17 ~ 0.24) in ♂，0.24(0.17 ~ 0.29) in ♀；vb = 0.48(0.32 ~ 0.67) in ♂，0.56(0.44 ~ 0.71) in ♀；dcl = 0.64 (0.57 ~ 0.68) in ♂，0.69(0.61 ~ 0.77) in ♀；sctl = 1.47(1.33 ~ 1.59)；sterno = 0.36(0.34 ~ 0.37)；orbito = 0.45(0.36 ~ 0.54) in ♂，0.48(0.40 ~ 0.58) in ♀；dcp = 0.59 (0.50 ~ 0.65)；sctlp = 1.08(1.06 ~ 1.19) in ♂，1.15(1.06 ~ 1.25) in ♀；C = 2.69 (2.61 ~ 2.79) in ♂，2.79(2.49 ~ 3.00) in ♀；4c = 0.84(0.75 ~ 0.90)；4v = 1.76(1.62 ~ 1.86) in ♂，1.71(1.56 ~ 1.85) in ♀；5x = 1.55(1.31 ~ 2.00) in ♂，1.40(1.07 ~ 1.71) in ♀；ac = 2.67(2.32 ~ 2.95) in ♂，2.52(2.30 ~ 2.91) in ♀；M = 0.51(0.44 ~ 0.65) in ♂，0.45(0.36 ~ 0.49) in ♀；C3F = 0.41 (0.36 ~ 0.50)。

正模：♂，中国云南省德钦县，海拔约3 650 m，1994 - Ⅵ - 8，张文霞采。

配模：1♀，同上。

副模：5♂，5♀，同上。

分布：中国（云南）。

亲缘关系：该种似 *Lordiphosa nigricolor* (Strobl, 1898)，但可通过鉴别特征尤其是复杂的阳茎基突的指状结构加以区别。

词源：指3对足腿节除末端外均为深棕色至黑色。

2 鲁甸拱背果蝇，新种 *Lordiphosa ludianensis* sp.nov.（图2）

鉴别特征：生殖背板（图2A）臀侧中央具一棕色齿状突。阳基侧突（图2：B，C）臀侧不分叉，细长、稍骨化，基部膨大、膜质，臀缘具4或5根感觉毛；无前侧突。阳茎（图2：B、C）分左右两叶，从每叶的亚中背侧起分叉、端部呈指状，背侧指突稍短；阳茎基突臀腹侧两根指状突特别长。生殖腹板（图2：B、C）臀背角被绒毛。

在下面的描述中，与 *L. nigrifemur* 相同的特征将不再重复。

雄性头部：眶区棕色。颊深棕色。第1鞭节浅灰色。触角芒端叉小，背叉4，腹叉2。下颚须浅棕色。

胸部：背板深棕色，沿背中鬃对称分布有2浅色细纵纹，起始于背板前缘，终止于前背中鬃内侧前。

足：暗黄色；前足基节棕色，3对足腿节除末端外均为深棕色。

雄性外生殖器：生殖背板（图2A）侧面及背部约具10根刚毛、臀腹缘约具9根刚毛。抱器（图2A）臀缘约具16个从背到腹长度逐次减小的深棕色齿、齿端圆。肛尾叶（图2A）约具17根刚毛。生殖板（图2：B、C）臀腹缘具粗短突起、端部圆。阳基内骨（图2：B，C）长约为阳茎的3倍、深棕色。

测量（mm）：BL = 2.16；ThL = 0.99（0.98 ~ 1.00）；WL = 2.32（2.28 ~ 2.36）；WW = 1.10（1.08 ~ 1.12）。

比例：arb = 3 ~ 4/1 ~ 2；FW/HW = 0.54（0.53 ~ 0.55）；ch/o = 0.24；prorb = 0.51（0.48 ~ 0.55）；rcorb = 0.19（0.16 ~ 0.23）；vb = 0.63（0.63 ~ 0.64）；dcl = 0.52（0.50 ~ 0.55）；sctl = 1.41（1.37 ~ 1.44）；sterno = 0.38；orbito = 0.36（0.36 ~ 0.37）；dcp = 0.50；sctlp = 1.17（1.13 ~ 1.20）；C = 2.73（2.53 ~ 2.93）；4c = 0.83（0.81 ~ 0.85）；4v = 1.68（1.61 ~ 1.75）；5x = 1.57（1.44 ~ 1.71）；ac = 2.51（2.44 ~ 2.57）；M = 0.50（0.46 ~ 0.54）；C3F = 0.47（0.44 ~ 0.50）。

正模：♂，中国云南省丽江鲁甸，海拔约3 050 m，1994 – Ⅵ – 13，张文霞采。

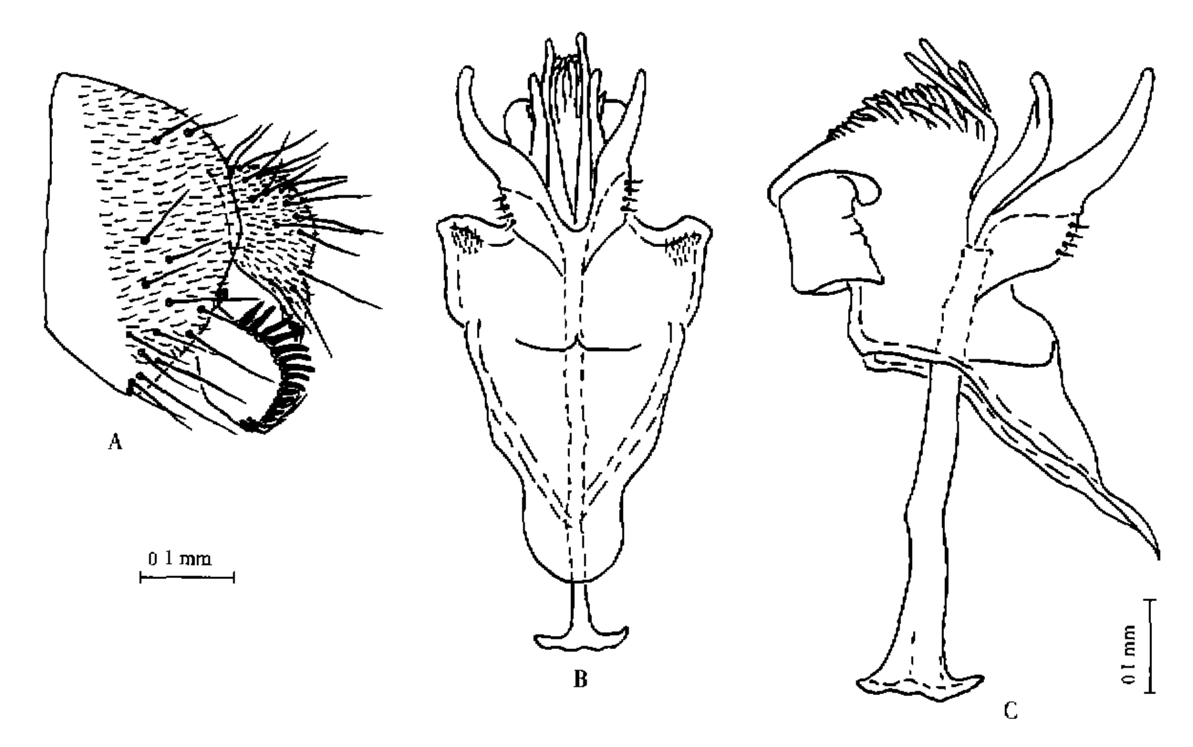


图2 鲁甸拱背果蝇，新种 *Lordiphosa ludianensis* sp.nov.

A. 生殖背板、肛尾叶和抱器（侧面观）（epandrium，cercus and surstylus，in lateral view）；B. 阳茎、阳基内骨、生殖板、生殖腹板（腹面观）（aedeagus，apodeme，gonopod and hypandrium，in ventral view）；C. 阳茎、阳基内骨、生殖板、生殖腹板（侧面观）（aedeagus，apodeme，gonopod and hypandrium，in lateral view）。

副模：1♂，同上。

分布：中国（云南）。

亲缘关系：该种与前一新种关系特别近，尤其是抱器及阳茎指状基突的结构相似，但可通过鉴别特征尤其是阳基侧突的结构加以区别。

词源：指标本的采集地。

3 施氏拱背果蝇，新种 *Lordiphosa shii* sp. nov.（图 3）

鉴别特征：肛尾叶（图 3A）臀腹缘细窄，约具9根粗短的簇鬃。生殖背板（图 3A）腹端窄，呈尖突；臀侧中部亦具一尖突。阳基侧突（图 3：B，C）长，侧面观弓形，腹侧突拱形；臀侧突双叉、腹侧枝呈长叶状，宽，端部尖、稍向外侧弯曲，骨化强，背缘具4根感觉毛，腹缘具1根感觉毛；背侧枝细长，比阳茎、腹侧枝均长，端部具长毛。

雌雄性头部：复眼暗黄色，被微毛。单眼三角区深棕色。间额深棕色。眶区棕色。单眼三角区与眶区具白色粉被。颜浅棕色，颜脊低，仅占颜面的1/2。口上片深棕色。颊深棕色。后头棕色。触角梗节棕色，具2根粗刚毛。第1鞭节浅灰色。触角芒端叉小，背叉4，腹叉1。下颚须棕色，端部具1根长的粗刚毛。

胸部：背板深棕色。肩板深棕色，具2肩鬃，上面1根较长。正中刚毛6列。小盾片深棕色。小盾基鬃平行，小盾端鬃交叉。

翅：透明，淡黄色。翅脉浅色。r-m 和 dm-cu 非云状。C_1 刚毛2，几乎等长。R_{2+3}端部微向前缘脉弯曲。R_{4+5}和 M_1 几乎平行。平衡棒乳白色。

足：黄色。3对足的胫节均具近端背鬃；前足及中足的胫节具端鬃。前足第1跗节长小于其余各分跗节长之和，中足和后足第1跗节长等于其余各分跗节长之和。

腹部：背板深棕色。腹板浅棕色。侧膜乳白色。

雄性外生殖器：生殖背板（图 3A）除前缘、腹突及臀侧中央的突起外被微毛；侧面及背部约具18根刚毛；腹突约具8根刚毛。抱器（图 3A）似长方形，端缘齿列约具20齿，稍向内侧弯曲排列；

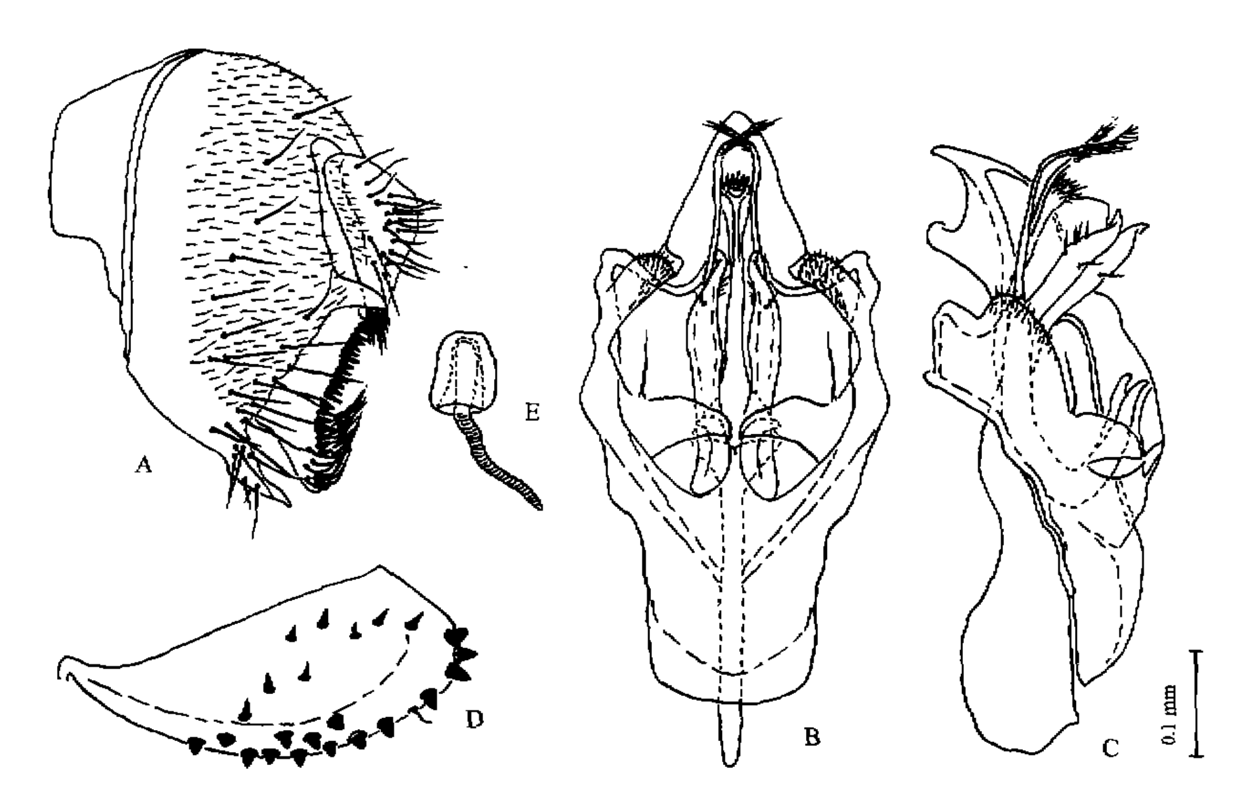


图 3　施氏拱背果蝇，新种 *Lordiphosa shii* sp. nov.

A. 生殖背板、肛尾叶和抱器（侧面观）（epandrium, cercus and surstylus, in lateral view）；B. 阳茎、阳基内骨、生殖板、生殖腹板（腹面观）（aedeagus, apodeme, gonopod and hypandrium, in ventral view）；C. 阳茎、阳基内骨、生殖板、生殖腹板（侧面观）（aedeagus, apodeme, gonopod and hypandrium, in lateral view）；D. 产卵器（oviscapt）；E. 受精囊（spermatheca）。

腹端缘内侧具密集长刚毛，臀腹部具7~8根刚毛。肛尾叶（图3A）椭圆形，仅前缘被微毛，约具19根刚毛，细窄的臀腹缘约具9根簇鬃。生殖腹板（图3：B，C）稍呈长方形，下1/3稍窄，臀腹缘被绒毛，具长侧中刺。生殖板（图3：B，C）融合，围绕阳茎及阳基侧突。阳茎（图3：B，C）细长，端部稍膨大，具微毛，臀腹侧具透明膜质结构。阳基内骨（图3：B，C）端部侧面观宽大，长约为阳茎的1.5倍。

雌性外生殖器：产卵器（图3D）端部圆，亚中部宽大。缘齿约15枚；盘齿端部尖，色稍浅，约8枚。前腹桥窄。受精囊（图3E）椭圆形，内陷几乎达受精囊的内顶端；内陷光滑，管具皱折。

测量(mm)：BL = 2.24 in♂，2.46(2.4~2.52) in♀；ThL = 1.10 in♂，1.08 in♀；WL = 2.88 in♂，2.96(2.8~3.12) in♀；WW = 1.30 in♂，1.31 (1.28~1.34) in♀。

比例：arb = 3~4/1~2；FW/HW = 0.54 (0.52~0.55)；ch/o = 0.37 in♂，0.40(0.34~0.45) in♀；prorb = 0.50 in♂；rcorb = 0.33 in♂；vb = 0.39 (0.36~0.41)；dcl 缺；sctl 缺；sterno = 0.44 in♂；orbito = 0.50 in♂，0.46 in♀；dcp = 0.60 in♂，0.53 (0.49~0.57) in♀；sctlp = 1.15 in♂，1.07(0.95~1.19) in♀；C = 2.51 in♂，2.74(2.66~2.82) in♀；4c = 0.88 in♂，0.80(0.77~0.83) in♀；4v = 1.73 in♂，1.59 (1.51~1.67) in♀；5x = 1.90 in♂，1.62(1.41~1.83) in♀；ac = 2.59 in♂，2.79 (2.65~2.92) in♀；M = 0.48 (0.41~0.52)；C3F = 0.43 in♂，0.35(0.34~0.36) in♀。

正模：♂，中国云南省泸水片马，1994-Ⅵ-22，张文霞采。

配模：1♀，同上。

副模：1♀，同上。

分布：中国（云南）。

亲缘关系：该种也属于 *nigricolor* 种组，但与前2种以及 *L. nigricolor*（Strobl，1898）不同，无穗状或指状的阳茎基突。可通过鉴别特征与 *nigricolor* 种组的其他物种加以区别。

词源：为纪念中国科学院昆明动物研究所施立明院士而得名。

参 考 文 献

Hu Y G, Toda M J. A taxonomic revision of *Dichaetophora* (Diptera: Drosophila) based on its phylogeny[J]. (in press.)

Zhang W X, Liang X C. 1992. Seven new species of the subgenus *Lordiphosa of Drosophila* (Diptera: Drosophilidae)[J]. *Acta Zootaxonomica Sinica*, 17(4): 473-480. [张文霞，梁醒财，1992. 果蝇属拱背果蝇亚属七新种(双翅目：果蝇科). 动物分类学报，17(4): 473-482.]

Zhang W X, 1993. Three new species of *nigricolor* species-group of *Drosophila* (*Lordiphosa*) (Diptera: Drosophilidae)[J]. *Acta Zootaxonomica Sinica*, 18(2): 220-224. [张文霞，1993. 黑色拱背果蝇种组三新种记述(双翅目：果蝇科). 动物分类学报，18(2): 220-224.]

Zhang W X, 1993. A review of the taxonomic status of the *Lordiphosa denticeps* group with descriptions of four new species (Diptera: Drosophilidae)[J]. *Entomotaxonomica*, 15(2): 144-154. [张文霞，1993. 双齿果蝇物种群 *Lordiphosa denticeps* group 的分类地位及四新种记述(双翅目：果蝇科). 昆虫分类学报，15(2): 144-154.]

Zhang W X, Shi L M, 1997. Subgenus *Phortica* of genus *Amiota* in Hengduan Mountains region, China, with descriptions of three new species (Diptera: Drosophilidae)[J]. *Zool. Res.*, 18(4): 367-375. [张文霞，施立明，1997. 横断山地区的伏绕眼果蝇亚属及三新种(双翅目：果蝇科). 动物学研究，18(4): 367-375.]

Three New Species of the Genus *Lordiphosa* (Diptera: Drosophilidae)

QUAN Lu-Jun ZHANG Wen-Xia

(*College of Life Sciences, Peking University, Beijing* 100871, *China quanlj@water.pku.edu.cn*)

Abstract: In this paper three new species of genus *Lordiphosa* were reported from Yunnan, China. These three new species all belong to *nigricolor* species-group. All of the types were deposited in College of Life Sciences, Peking University.

1 *Lordiphosa nigrifemur* sp. nov. (Fig. 1)

Diagnosis: Femora dark brown to black except for terminal parts. Paramere (Fig. 1: D, E) caudally bifurcated; dorsal branch approximately twice as long as ventral branch; anterior process small, ventral margin

with *ca*.6 sensilla points medially. Aedeagus (Fig.1: D,E) double branched, bifurcated submedially at dorsal part of each branch, finger-shaped at the tips, dorsal process shorter; aedeagal basal process connected to gonopod with membrane, bearing numerous finger-shaped processes.

Male Terminalia: Epandrium (Fig.1A) nearly entirely pubescent except for ventral and anterior margin, with *ca*.8 setae laterally and dorsally and *ca*.8 setae on caudoventral margin. Surstylus (Fig.1: A, B) with *ca*.12 dark brown, apically pointed primary prensisetae decreasing in size downward and arranging in convex row on nearly entire length of distal margin; with a few long stout spines on inner surface and 2 setulae caudoventrally. Cercus (Fig.1: A, C) oval, entirely pubescent, with *ca*. 12 setae; tapering ventrally, with *ca*.5 stout spines in a row on caudoventral corner. Hypandrium (Fig.1: D, E) slightly triangular, without paramedian spines. Gonopods (Fig.1: D, E) fused, saddle-shaped in lateral view, with slender process at caudoventral margin. Apodeme (Fig.1: D, E) broad terminally, dark brown, approximately twice as long as aedeagus.

Female Terminalia: Oviscapt (Fig.1F) apically round, submedially broad, with *ca*. 13 marginal and *ca*.7 apically pointed lateral ovisensilla. Spermatheca (Fig.1G) oblate, with shallow indentation on capsule; spermathecal duct introverted into the inner tip of spermatheca. The basal half of introvert and duct both wrinkled.

Holotype: ♂, Deqin, Yunnan Province, China, alt. *ca*.3 650 m, 8 – Ⅵ – 1994, coll. ZHANG Wen-Xia.

Allotype: 1♀, same data as holotype.

Paratype: 5♂, 5♀, same data as holotype.

Distribution: China (Yunnan).

Relationship: This species resembles *Lordiphosa nigricolor* (Strobl, 1898), but differs from it in the diagnosis characters, especially in the complicated structure of aedeagal basal finger-shaped process.

Etymology: Referring to femora dark brown to black except for terminal parts.

2 *Lordiphosa ludianensis* sp. nov. (Fig.2)

Diagnosis: Epandrium (Fig.2A) protrused slightly at the middle of the caudal margin. Paramere (Fig.2: B, C) not branched, long, slightly sclerotized, dilated basally, with *ca*.4 sensilla on ventral margin. Aedeagus (Fig.2: B, C) double branched, bifurcated submedially at dorsal part of each branch, finger-shaped at the tips, dorsal process shorter; aedeagal basal process with 2 very long finger-shaped processes caudoventrally. Hypandrium pubescent at the caudodorsal corner.

Male Terminalia: Epandrium (Fig.2A) with *ca*.10 setae laterally to dorsally and *ca*.9 setae on caudoventral margin. Surstylus (Fig.2A) with *ca*. 16 dark brown, apically round primary prensisetae. Cercus (Fig.2A) with *ca*. 17 setae. Gonopods (Fig.2: B, C) with an apically round process at caudoventral margin. Apodeme (Fig.2: B, C) dark brown, approximately three times as long as aedeagus.

Holotype: ♂, Ludian, Lijiang County, Yunnan Province, China, alt. *ca*.3 050 m, 13 – Ⅵ – 1994, coll. ZHANG Wen-Xia.

Paratype: 1♂, same data as holotype.

Distribution: China (Yunnan).

Relationship: This species resembles the foregoing new species in the structure of surstylus and finger-shaped aedeagal basal processes, but it can be distinguished from it by the diagnosis characters, especially by the structure of paramere.

Etymology: Pertaining to the type locality.

3 *Lordiphosa shii* sp. nov. (Fig.3)

Diagnosis: Cercus (Fig.3A) tapering ventrally, with a tuft of stout spines on caudoventral corner, *ca*. 9. Epandrium (Fig.3A) narrow and pointed ventrally, with an apically pointed process at the middle of caudal margin. Paramere (Fig.3: B, C) long, bow-shaped in lateral view, ventrally recurved process arched; caudally recurved process bifurcated, ventral branch broad, apically pointed, slightly curved outwards at the tip, strongly sclerotized, with *ca*.4 long sensilla on dorsal margin and *ca*. 1 sensilla on ventral margin; dorsal branch slender, longer than both aedeagus and ventral branch, with long hairs at the tip.

Male Terminalia: Epandrium (Fig.3A) broad, pubescent except for anterior margin and the ventral and central processes; with *ca*.18 setae laterally to dor-

sally; with *ca*. 8 setae on ventral process. Surstylus (Fig.3A) somewhat rectangular, with *ca*. 20 primary prensisetae in concave row on nearly entirely length of distal margin; with a tuft of long stout spines on inner surface and *ca*. 7 setulae caudoventrally. Cercus (Fig.3A) oval, pubescent only on anterior margin, with *ca*. 19 setae; tapering ventrally, with a tuft of stout spines on narrow ventral margin. Hypandrium (Fig.3: B, C) somewhat rectangular, narrower at ventral 1/3 part, pubescent caudoventrally, with a pair of long paramedian spines. Gonopods (Fig.3: B, C) fused, surrounding aedeagus and parameres. Aedeagus (Fig.3: B, C) slender, with micro-hairs on somewhat swollen tip, with transparent membrane-like stucture caudoventrally. Apodeme (Fig.3: B, C) broad in lateral view, approximately one and a half as long as aedeagus.

Female Terminalia: Oviscapt (Fig.3D) apically round, submedially broad, with *ca*. 15 apically round marginal and *ca*. 8 apically pointed lateral ovisensilla. Spermatheca (Fig.3E) oblate, introvert deep, nearly reached into the inner tip of spermatheca. Introvert smooth, duct wrinkled.

Holotype: ♂, Pianma, Lushui County, Yunnan Province, China, 22 - Ⅵ - 1994, coll. ZHANG Wen-Xia.

Allotype: 1♀, same data as holotype.

Paratype: 1♀, same data as holotype.

Distribution: Cbina (Yunnan).

Relationship: This species belongs to *nigricolor* species-group, but differs from the foregoing two species and *L. nigricolor* (Strobl, 1898) in that it has no serrated, conical or finger-shaped aedeagal basal process, it can be distinguished from other species in this species-group by the diagnosis characters.

Etymology: shii, in memory of Prof. SHI Li-Ming, Kunming Institute of Zoology, the Chinese Academy of Sciences.

Key words: Diptera; Drosophilidae; *Lordiphosa*; New species

书讯

《南美斑潜蝇综合防治技术》出版

南美斑潜蝇 *Liriomyza huidobresis* (Blandchard) 是20世纪90年代初期传入我国,并相继传入云南的重要害虫。由于该虫具有传播扩散速度快,不受季节地域限制的特点,因而使入侵地的粮食、棉花、蔬菜、花卉及多种经济作物受到严重危害。自1995年以来,中国科学院昆明动物研究所的科技人员深入云南各地调查,探讨并总结对该虫的综合防治技术以及应用推广经验。在此基础上编写了《南美斑潜蝇综合防治技术》一书,本书已于2000年5月由云南大学出版社出版。

本书首先介绍了南美斑潜蝇的形态特征、国内外分布以及在云南省内的分布、主要寄主植物等;同时结合农业生产实际,对斑潜蝇危害的严重性、生物生态学习性、成灾原因、防治策略、调查和测报方法、防治指标、综合防治技术等做了全面系统的论述。本书采用图文结合的编写形式,把斑潜蝇的形态特征、发生规律、综合防治的关键技术用插图简明扼要地分解绘出,并配以深入浅出的文字解释,通俗易懂,便于操作。适合于农业干部、农技人员以及广大农民群众阅读,不同文化层次的读者,均可从中获益。

《南美斑潜蝇综合防治技术》,32开本,共70千字,定价3.80元(邮购另加挂号邮费0.70元)。欲购者可直接汇款到中国科学院昆明动物研究所(昆明市教场东路32号,邮编650223)。联系人:肖宁年;电话:0871-5130931。

肖宁年
(中国科学院昆明动物研究所 650223)